LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AN AUTONOMOUS INSTITUTION SINCE 2010)

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

(Accredited By NBA under Tier-1)

acm

IEEE

Guest Lecture
On
Stack and Queue Applications

by

Mr. M. Tribhuvan Reddy
LTI Mindtree

Date: 27-12-2025

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(An Autonomous Institution since 2010)
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Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Date: 25-03-2025

CIRCULAR

This is to inform all II-Semester students of the CSE Department that a Guest Lecture will be conducted as part of the curriculum, delivered by an industry expert.

Event Details:

- **Topic**: Stack and Queue Applications
- **Date:** 27th March 2025
- **Time:** 07:00 PM – 09:00 PM
- **Guest Speaker:** Mr. M. Tribhuvan Reddy, LTI Mindtree

Mode of Delivery: Online Mode (Microsoft Teams)

All students are encouraged to attend this session, as it presents an excellent opportunity to gain in-depth knowledge and explore real-world applications of stacks and queues.

- **Note**: Attendance is mandatory for all II-Semester CSE students.

25/03/25

Dr. D. Veeraiah

(Head of the Department)

HEAD
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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

A One-day Guest Lecture Report

on

"Stack and Queue Applications"

Event Type	**:** A One-Day Guest Lecture
Date	**:** 27/03/2025
Time	**:** 07:00 PM - 09:00PM
Mode	**:** Microsoft Teams Platform
Organized by	**:** Department of Computer Science and Engineering, LBRCE.
Resource Speaker	**:** Mr. M. Tribhuvan Reddy LTI Mindtree Hyderabad.
Convener	**:** Dr. D. Veeraiah
Coordinator(s)	**:** Dr.Y.Vijaya Bhaksar Reddy, Dr. S.Nagarjuna Reddy, Mr. N. Srinivasa Rao, Mr. S. Srinivasa Reddy
Target Audience	**:** B. Tech II Sem CSE.
Total no. of Students	**:** 275 Students

Objective of the Event

A guest lecture on "Stack and Queue Applications" was conducted on 27th March 2025. The session was delivered by Mr. M. Tribhuvan Reddy, a distinguished professional from LTI Mindtree. The lecture aimed to provide students with insights into the real-world applications of stack and queue data structures in various domains of computing.

Key Highlights of the Lecture:

Mr. Tribhuvan Reddy commenced the session by introducing the fundamental concepts of stacks and queues. He elaborated on their significance in computer science and their implementation in different programming languages.

The following key topics were covered during the session:

1. **Introduction to Stacks and Queues:**
    - Definition and working principles of stacks and queues.
    - Differences between stacks (LIFO) and queues (FIFO).
    - Variants such as circular queues, priority queues, and double-ended queues (Deque).
2. **Applications of Stacks:**
    - Expression evaluation (infix to postfix conversion, postfix evaluation).
    - Function call management in recursion.
    - Undo and redo operations in text editors.
    - Browser history tracking.
3. **Applications of Queues:**
    - Process scheduling in operating systems.
    - Printer job scheduling.
    - Data packet handling in network routers.
    - Real-world simulations like customer service queues.

Interactive Session and Q&A:

The lecture was followed by an engaging Q&A session where students actively participated and sought clarification on various concepts. Mr. Reddy shared valuable insights on optimizing stack and queue operations and provided real-time examples from industry projects.

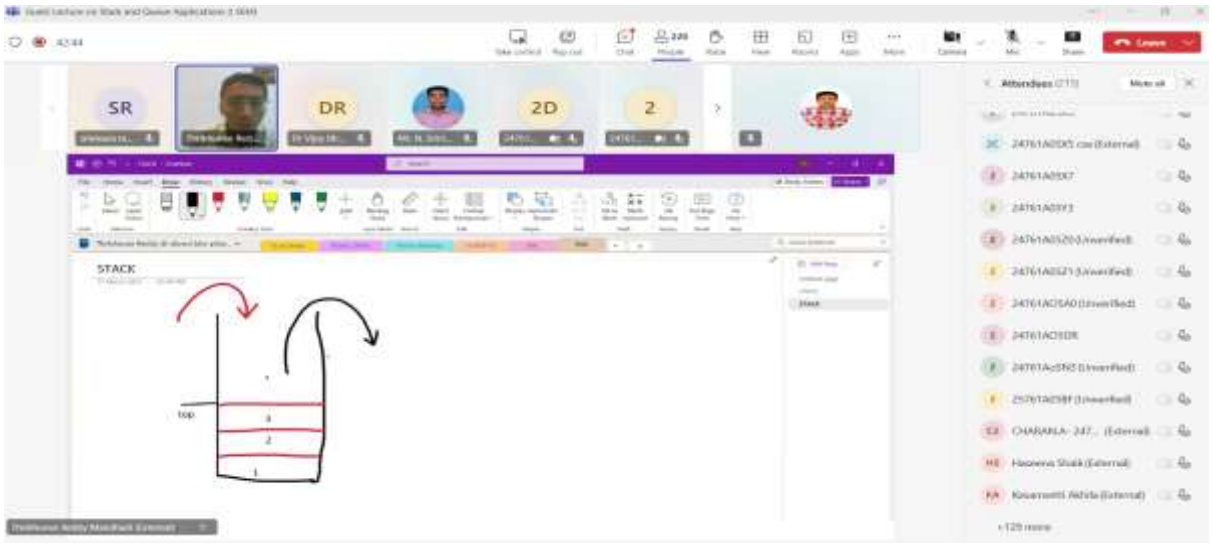
Conclusion:

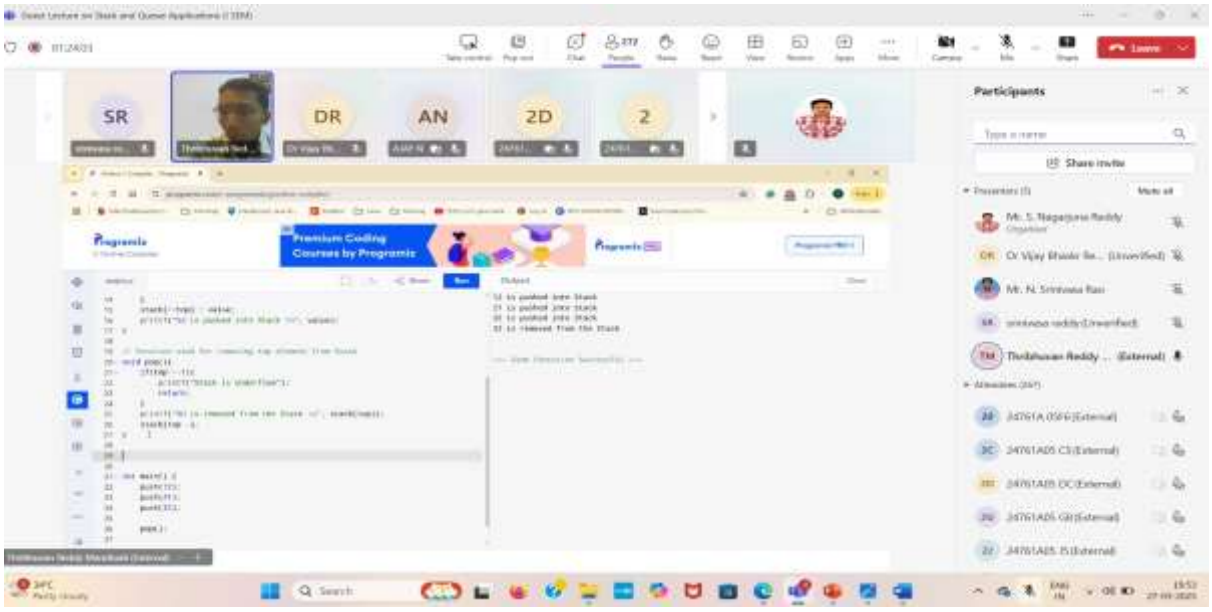
The guest lecture by Mr. M. Tribhuvan Reddy was highly informative and provided students with a deep understanding of stack and queue applications in both theoretical and practical aspects. His expertise and industry experience enriched the session, making it a valuable learning opportunity for all attendees. The lecture successfully bridged the gap between academic learning and real-world applications, leaving students with enhanced knowledge and enthusiasm for data structures.

Acknowledgment:

We extend our heartfelt gratitude to Mr. M. Tribhuvan Reddy for sharing his knowledge and expertise. We also thank the faculty and organizers for facilitating this insightful session.

Sample Pictures:





Dr. Y.Vijaya Bhaksar Reddy, Professor

Dr. S. Nagarjuna Reddy ,Associate Professor **Dr. D. Veeraiah**

(Coordinator's) **(Head of the Department)**